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ISD News and Views

STATE DOCUMENTS COLLECTION

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MONTANA STATE LIBRARY
1515 E. 6th AVE.
HELENA, MONTANA 59601

ISDINFO

How can an individual get information about Information Services Division, what software is available on the mainframe, what the billing rates are, what standards exist, and who to contact? ISDINFO!

To access ISDINFO, select I from the main TSO/ISPF menu. This will bring up the introductory panels. The main topics are:

1. Organization of Information Services Division. These panels tell how ISD is organized, who to call for what information, and their phone numbers.
2. Software Available to the User. These panels list the major software products available on the mainframe and some general information about each product. The information is grouped by product use--such as compilers, utilities, and report generators. These listings are not 100% comprehensive, but list the most-used products.
3. Common Information Requests. These panels have information on how to get started at ISD, such as how to obtain a TSO library, a user i.d., and billing number. The rate schedules for costs associated with using the mainframe and services provided by ISD are published in these panels.
4. Hardware and Job Control Language (JCL). These panels contain information on the hardware configuration and JCL standards specific to the State of Montana. The JCL specifics include job classes and their associated costs, special forms available for output, how to code a job statement and setup card, system defaults, and job priorities and their associated costs.

If you have questions or suggestions about the use of ISDINFO, please call Jane Black Eagle in End User Computing, 444-2742.

Mainframe

???

Is your agency

- printing on the line printer?
- printing 1-part paper?
- using special pre-printed forms?
- printing more than 48 lines per page?

Would your agency like to

- reduce its printing costs?
- reduce the amount of paper it prints?
- reduce the size of paper it prints on?
- increase the readability of its forms?
- file its printed reports in a binder that would fit on a desk or a shelf?
- have its output printed quickly and easily?

If the answer to ANY of these questions is YES, then you are the WINNER in the **budget-saving/space-saving/time-saving** stratagem--by using the new IBM 3825 AFP Laser Printer at ISD.

This printer

- saves print costs
- saves time by printing 1 page per second
- reduces paper size
- reduces output from 50-88 percent
- creates overlays that eliminate pre-printed forms
- prints logos, State Seal, signatures and letterheads
- uses many different fonts including Bar Codes and OCR
- has many other outstanding features and capabilities.

It's simple and easy to convert. Just call Mick at 444-2571 or Jan at 444-2901.

Term Contract Status

Microcomputer Term Contract Updates

Addenda are forthcoming on all three microcomputer term contracts to reflect new prices and products. There continues to be delays within ISD because of the rapidly changing environment and staffing changes, but we will work with agencies who have a need to buy equipment before it has been formally tested and approved for inclusion in the term contract.

We have reached a tentative agreement with Digital Equipment that all new pricing--with a few exceptions--will be 8% off the DESKTOP DIRECT from DIGITAL price. This new pricing structure should be much easier for all of us to use.

If you have any questions about the latest prices or products, please call the vendor or Curt Secker (444-1614) to insure that you are aware of the product and pricing changes.

ComputerLand of Western Montana has submitted several price and product changes, including announcement of a new HP LaserJet 4. You should be receiving an addendum to T.C. 336V early in December if you have not already received it.

Proposed and final term contract price lists will be distributed, on request, through Zip!Mail. If you would like to be on the distribution list, please call Curt (444-1614) or Sharon (444-2918).

Microcomputer Maintenance

A term contract has been established with IBM for microcomputers and peripheral maintenance. Agencies can place equipment on the maintenance term contract by submitting a P.O. which contains the following information:

- Term Contract #364-W

- Level of Service Requested (Level 1-5):
 - Level 1 - On-Site, 4 hour repair (Helena only)
 - Level 2 - On-Site, 4 hour repair
 - Level 3 - On-Site, 24 hour repair
 - Level 4 - Priority Mail
 - Level 5 - Regular Mail/Carry-In
 - Level 6 - Time & Materials
 - Level 7 - Parts & Consultation
- Maintenance Price
- Manufacturer
- Machine Type
- Machine Model
- Machine Serial #
- Description (if applicable)
- Size of Hard Drive (if requesting separate maintenance)
- IBM Customer Number
- Effective Date (when maintenance will begin)
- Location of Machine

The vendor address on the P.O. should read:

IBM
 Attention: Rich Meyering
 100 North Park Avenue
 Helena, MT 59601

Should you have any questions regarding this term contract, please contact Sharon Ranstrom at 444-2918.

Calendar of Events

- December 3 - Penbased Computing Seminar (GRID Systems)
- December 9 - Data Processing Managers' Group (regular meeting)
- December 11 - ISD Christmas Party
- December 16 - Data Processing Managers' Group (database directions review and comment)

Microcomputer

Associating Files with Applications in Windows (Part 2)

Last month I presented how to "associate" a file with a particular application program (i.e., LETTER.WP with WP.EXE) via the file's extension and the Windows "ASSOCIATE" command. What you ended up with was the ability to double-click on a filename in the File Manager in order to start the "associated" application with the file already loaded. This month I am going to take it one step further and illustrate how to assign an icon to the filename so that you can start the associated application with the file already loaded by simply double-clicking the icon assigned to the filename.

To assign an icon to a filename, execute the following instructions completely and in order:

1. Make whatever group you want the new icon to appear in (i.e., accessories, main, etc.) the default group by clicking on it.
2. Click on FILE in the Program Manager.
3. Click on NEW.
4. Select PROGRAM ITEM and click on OK.
5. Fill in the DESCRIPTION area with whatever text you want to appear under the icon when it is displayed (i.e., Daily Report).
6. Tab to the next line, Command Line, and fill in the FULL drive and path for the FILE-NAME (i.e., c:\data\wp\dlyrpt.wp).
7. Click on CHANGE ICON. You will get a message stating that "no icons are available in the current file; you can select icons from the Program Manager".
8. Click on OK. A scrollable window will appear, displaying icons you can choose from.
9. Scroll (left/right) through the icons until you find one you want to select.

10. Click on the icon you want to select to highlight it.

11. Click on OK.

12. Keep clicking on OK until you return to the default group window.

You should now be back in the default program group you selected in step #1. The icon you set up should appear in that group. To run your application with the file already loaded, double-click on the icon.

If you have any questions about this article or Windows in general, contact Denny Knapp in End User Computing, 444-2072.

Multiple Configuration Files

Out of Memory! Depending on your situation, you may receive out-of-memory errors while executing DOS applications under Microsoft Windows, on a network, or even on a stand-alone. The only solution is to provide your application with the most memory available.

You may attack this situation differently, depending on your DOS version and memory manager. If you don't have a memory manager, or are not using DOS 5.0, the most common way is to use multiple configuration files. One file typically would be trimmed of all unnecessary drivers or environment settings in order to allow for an application to have all the available memory. The other configuration would satisfy most other applications. Potential drivers and settings to review would include: reducing number of open files, buffer size, environment size, DOS shell, network drivers, mouse drivers, and Windows drivers. Once you have created the two configuration files, a bat file should be created to copy the correct configuration files, depending on your needs. For example, using a text editor you would create the following files:

File Name = Maxmem.bat

Contents of File -

```
copy c:\config.max c:\config.sys
copy c:\autoexec.max c:\autoexec.bat
```

(Wherein config.max and autoexec.max are the configuration files which would provide maximum memory to your applications.)

File Name = STD.bat

Contents of File -

```
copy c:\config.std c:\config.sys
copy c:\autoexec.std c:\autoexec.bat
```

(Wherein config.std and autoexec.std are the configuration files which provide the basic memory requirements for most software.)

To have your PC automatically reboot once you update your configuration, a reboot command file can be used.

Using a text editor, type the following and save the file as text, and name it warmboot.scr:

N WARMBOOT.COM

```
A 100
MOV BX,1234
MOV AX,40
MOV DS,AX
MOV[72],BX
JMP FFFF:0
```

RCX

11

W

Q

Once you are finished, type the following from DOS: DEBUG <warmboot.scr. This will cause the program to be compiled and it will be created with a name of warmboot.com. (Debug is a DOS utility and you must be pathed to it to execute.) Once the Warmboot.com file is created, it can be used from within your bat file to reboot your PC. The Warmboot.com would simply be added after the last copy statement in the bat file. For example:

File Name = Maxmem.bat

Contents of File -

```
copy c:\config.max c:\config.sys
```

copy c:\autoexec.max c:\autoexec.bat
c:\warmboot.com

For further information, call Jerry Kozak at 444-2907 or Irv Vavruska at 444-2858, at End User Computing.

TECHTALK

Have you ever been in Lotus 1-2-3 and seen the MEM indicator flashing on the status line? Or have you ever seen an ERROR with a Memory Full message or OUT OF MEMORY message when working with or retrieving a spreadsheet? These are sometimes annoying messages, but many of them can be easily corrected.

First of all, to see how much memory you have available, just press /Worksheet Status. 1-2-3 will display how much conventional and expanded (if any) memory you have available. Before trying any of the following suggestions, ALWAYS make a copy of your file by pressing /File Save and giving your file a new name. By making a backup copy of your file, you will always have a backup if you destroy the file you are working with.

To make more memory available to your spreadsheet, you can do the following:

1. Check to see if UNDO is enabled. If it is, the UNDO indicator will appear in the status line at the bottom of the screen. You can disable UNDO by pressing /Worksheet Global Default Other Undo Disable. This will free up one half of your available memory.
2. You may also try saving your spreadsheet with /File Save, clearing the worksheet screen with /Worksheet Erase, and then retrieving the spreadsheet again. This will free up any fragmented memory you may have created as you were working with Lotus 1-2-3.
3. You can also remove any Add-ins that you are not using. This will free up memory.
4. Another tip to try is to erase any unnecessary data in your spreadsheet. The less information you have in your spreadsheet, the less memory it will require. This includes erasing unneeded cells, unneeded range names, or unneeded graphs. All these will free up memory.
5. Try organizing your data horizontally as much as possible and make sure you do not have large gaps between data in the same column. If you enter data in a column, 1-2-3 reserves memory for all the cells in the column from the first cell you enter data in to the last cell you enter data in, even if the cell is blank. This is called the *active area* for that column. To determine the size of the active area for the entire worksheet, press END HOME. This will take you to the last and rightmost cell in your worksheet. Check to make sure that you are using all of this active area. If you are not, delete any unneeded rows and/or columns and then resave your spreadsheet. Clear the worksheet from memory and then retrieve the worksheet again. You should now have more available memory.
6. You can minimize cell formatting. Formatting a cell also makes a cell active--whether or not the cell contains data--so a blank, formatted cell uses memory. In general, try to format cells that contain, or will contain, data. Again, use END HOME to determine the active area of the worksheet. Even if the cells are blank, if they are formatted, they will be active and using memory. Remove the formatting from these cells or delete any unneeded rows and/or columns. Then save the spreadsheet, clear the worksheet from memory, and retrieve the spreadsheet again.
7. You may also unload any unneeded memory-resident programs.
8. Avoid running two copies of Lotus 1-2-3.
9. Avoid using the Lotus Access System. If you start Lotus 1-2-3 by typing LOTUS at the DOS prompt you are using the Access System. If you just type 123 at the DOS prompt, you will only be starting Lotus 1-2-3.

10. If the above solutions do not give you any more available memory, you may want to consider upgrading your computer's conventional memory to 640K (if you do not already have 640K) or installing expanded or extended memory. If you already have expanded or extended memory, you may need to reconfigure your PC so that Lotus 1-2-3 will recognize your additional memory.

If you have any questions about memory availability, or any other questions about Lotus 1-2-3, please call Irvin Vavruska at 444-2858, or Jerry Kozak at 444-2907, both from End User Computing.

End Notes

ISD Christmas Party

Friends of ISD, you are invited to ISD's Christmas Party. The party is scheduled for Friday, December 11th, at 7:30 p.m., at the Knights of Columbus Hall, 2201 E. Chestnut. For ticket information, please call 444-2700. We welcome all our agency friends.

ISD Staffing Change

Curt Secker has transferred to the Telecommunications/Network Services Bureau. He will continue, through the month of December, to be the contact on agency acquisition support (review of purchase orders/requisitions, providing configuration assistance beyond that provided by the vendors, and term contract assistance in general) and to serve as the *News and Views* editor. We will keep you posted, through Email, DPMG, and *News and Views*, on staffing changes and identification of new contacts when replacements have been hired.

Submit Articles

If you wish to submit an article to *News and Views* for publication, the following schedule provides dates that articles must be received by in order to be included in the issues listed below:

February Issue 12/23/92

March Issue 01/22/93

ISD Network Assistance Center 444-2526

Network trouble calls (data and voice) should come into Information Services Division through the **Network Assistance Center**, at **444-2526**. The Center is staffed from 7:30 a.m. to 5:00 p.m., and staff are also on call during the night.

Please use the Network Assistance Center number to report your agency's network-related problems.

880 copies of this public document were printed at a cost of \$264. Distribution costs are \$16.50.
Editor: Curt Secker

Training Information

All classes will be held in the Training Room in the basement of the Teachers Retirement Building at 1500 6th Ave. unless another location is specified. There is a limit of 12 participants per paid class and 20 participants per demonstration (free) class, unless otherwise announced. The cost of classes is shown below. Please note that these costs are subject to change each July 1st.

To enroll in a class, send an enrollment application to the Department of Administration, ISD Network Information Center, Mitchell Building, Helena, MT 59620. If you have questions about enrollment, telephone the Network Information Center, at 444-2973. *Once you enroll in a class, by mail or telephone, the full fee will be charged UNLESS you cancel at least three business days before the first day of class.*

The classes available and their costs are as follows:

<u>Class Name</u>	<u>Cost</u>	<u>Length in Days</u>
MVS/ESA - Differences from MVS/XA	FREE	¼
Introduction to TSO/SPF	\$ 80.00	1
Introduction to JCL (Job Control Language)	320.00	4
*Introduction to CICS Programming	**	5
*Introduction to IDMS Database Programming	**	5
*IDMS ADS/Online	**	5
*Introduction to CULPRIT	240.00	3
*Subscribing in CULPRIT	FREE	¼
*CULPRIT Programming for IDMS	160.00	2
*Using COMPAREX	40.00	½
Introduction to SAS: Module 1	20.00	¼
Module 2	20.00	¼
Module 3	200.00	2½
*Novell Network Administration	160.00	2
*Novell NetWare System Manager	**	3
*Novell NetWare Advanced System Manager	**	3
Novell Netware Service & Support	**	5
*PC Memory Management Options and Considerations	FREE	¼
*Windows Purchase, Installation and Use Considerations	FREE	¼
*Windows for the Technical Support Team	**	2
*Beginning Microcomputer Skills	80.00	1
Fundamentals of DOS	80.00	1
Intermediate DOS	80.00	1
*Introduction to Novell Networks	40.00	½
*Introduction to Windows	80.00	1
Introduction to WordPerfect (5.0 or 5.1)	120.00	1½
*Advanced Features of WordPerfect 5.0	120.00	1½
WordPerfect (5.0 or 5.1) Complex Document Functions	40.00	½
More WordPerfect (5.0 or 5.1) Complex Document Functions	40.00	½
WordPerfect 5.1 Tables	40.00	½
WordPerfect 5.1 Columns and Math Functions	40.00	½
*WordPerfect 5.1 Graphics	80.00	1
*WordPerfect Merge and Sort Functions	40.00	½

WordPerfect 5.1 Macros	80.00	1
*WordPerfect 5.1 Tips and Tricks	FREE	¼
*Conversion from WordPerfect 5.0 to 5.1	FREE	¼
*Spreadsheet Design and Documentation	80.00	1
*Conversion from Lotus 1-2-3 Rel. 2.2 to Rel. 3.1	FREE	¼
Introduction to Lotus 1-2-3, (Release 2.3 or 3.1)	160.00	2
Intermediate Lotus 1-2-3, (Release 2.3 or 3.1)	80.00	1
*Lotus 1-2-3 WYSIWYG Features (Release 2.3 or 3.1)	40.00	½
*Lotus 1-2-3 Graphics (Release 2.3 or 3.1)	40.00	½
*Lotus 1-2-3, Release 3.1, 3-Dimensional Spreadsheets	40.00	½
*Lotus 1-2-3 Printing (Release 2.3 or 3.1)	40.00	½
Freelance	80.00	1
*Lotus 1-2-3 Macros (Release 2.2, 2.3, or 3.1)	160.00	2
*Introduction to Lotus 1-2-3 Database Features	160.00	2
Introduction to PFS:Professional File, Ver. 2.0	80.00	1
Micro Database Concepts and Design	80.00	1
Introduction to R:Base, Release 3.1	200.00	2½
*Advanced R:Base Release 3.1	160.00	2
*R:Base Query and Reports (Rel. 3.1)	80.00	1
R:Base Views (Rel. 3.1)	FREE	¼
*Intermediate R:Base (Rel. 3.1)	160.00	2
*Introduction to dBASE III+	280.00	3½
*State Telephone Training	FREE	¼
Orientation to State's Computer Center	FREE	¼
Introduction to IBM's Library Reader	FREE	¼

* This class is not scheduled during the time covered in this issue.

Training Calendar

Data Network/Mainframe Classes

Dec. 14-16	Introduction to SAS
Jan. 15 a.m.	Orientation to State's Computer Center
Jan. 25	Introduction to TSO/SPF
Jan. 26, Jan. 27 a.m.	MVS\ESA - Differences from MVS\XA
Feb. 11, 16 a.m.	Introduction to IBM Library Reader
Feb. 23, 24, 25, 26	Introduction to JCL

Microcomputer Classes

Jan. 6	Introduction to PFS:Professional File, Ver. 2.0
Feb. 17	Fundamentals of DOS
Feb. 22	Intermediate DOS

Word Processing Classes

Dec. 3 a.m.	WordPerfect Complex Document Functions
Dec. 3 p.m.	More WordPerfect Complex Document Functions
Dec. 9, Dec. 10 a.m.	Introduction to WordPerfect (5.0 or 5.1)
Jan. 21 a.m.	WordPerfect 5.1 Columns & Math Functions
Jan. 21 p.m.	WordPerfect 5.1 Tables
Jan. 28, Jan. 29 a.m.	Introduction to WordPerfect (5.0 or 5.1)
Feb. 8, Feb. 9 a.m.	Introduction to Wordperfect (5.0 or 5.1)
Feb. 10	Wordperfect Macros
Feb. 18 a.m.	Wordperfect Complex Document Functions
Feb. 19 a.m.	More Wordperfect Complex Document Functions

Spreadsheet Classes

Dec. 1 & 2	Introduction to Lotus 1-2-3 (Release 2.3 or 3.1)
Dec. 8	Freelance
Jan. 20	Intermediate Lotus 1-2-3 (Release 2.3 or 3.1)
Feb. 3 & 4	Introduction to Lotus 1-2-3 (Release 2.3 or 3.1)

Database Classes

Dec. 7 p.m.	R:Base Views, Release 3.1
Jan. 11	Micro Database Concepts & Design
Jan. 12-13, Jan. 14 a.m.	Introduction to R:Base, Release 3.1

Data Network/Mainframe Classes

ORIENTATION TO THE STATE'S COMPUTER CENTER: presented by Jane Black Eagle of the Application Services Bureau

DATE: January 15, 1993
TIME: 9:00 a.m. to 10:00 a.m., or
10:30 a.m. to 11:30 a.m.
PREREQUISITE: None
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This free class will provide an overview of the services available from the Information Services Division and will include a tour of the State's central computing facility in the Mitchell Building. Students will learn where to get help with their computing needs as well as the types of help and services available.

INTRODUCTION TO TSO/SPF: presented by Jerry Kozak of the Application Services Bureau

DATE: January 25, 1993
TIME: 8:30 a.m. to 4:30 p.m.
PREREQUISITE: 3270nd (Interactive Class on Terminal Operation)
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

"Introduction to TSO/SPF" is a hands-on workshop about using computer terminals (or PC terminal emulators) and the SPF editor. SPF is an easy-to-learn, menu-driven system used to enter data and programs into the State's mainframe computer. Entering data, changing data and submitting programs (jobs) for execution are covered in detail. Also covered are SPF's utility functions and the tracking of job output.

This course is essential for state government personnel using terminals or PC's linked to the State's central computer. It is a prerequisite for many other ISD classes.

INTRODUCTION TO JCL (JOB CONTROL LANGUAGE): presented by Denny Knapp of the Application Services Bureau

DATE: February 23, 24, 25, 26, 1993
TIME: 8:30 a.m. to 4:30 p.m. each day
PREREQUISITE: Introduction to TSO/SPF
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This course is designed for programmers, I/O controllers, operations technicians or users of report-writing software who submit jobs on the State's mainframe system.

The course will cover:

- Syntax and coding of IBM Job Control Language (JCL)
- MVS operating system
- Handling datasets and device assignments
- Some of the IBM utilities
- Troubleshooting and interpreting system messages
- Hands-on experience writing and executing JCL

INTRODUCTION TO SAS: presented by Randy Holm and Jane Black Eagle of the Application Services Bureau

This course has been designed in a modular fashion to accommodate both mainframe and PC SAS users. New mainframe SAS users will want to take modules 1 and 3. Module 2 is designed for the PC "Introduction to SAS" course.

DATE & TIME: Dec 14, 8:30 a.m. to 10:30 a.m. **Module 1**, Running Mainframe SAS (JCL, Display Manager, etc.)
Dec 14, 10:45 a.m. to noon **Module 2**, Running PC SAS
Dec 14, 1:00 a.m. to 4:30 p.m. **Module 3**, Introduction to SAS for
Dec 15, 8:30 a.m. to 4:30 p.m. mainframe and PC users
Dec 16, 8:30 a.m. to 4:30 p.m.

PREREQUISITES: Basic Terminal Skills, TSO logon i.d., TSO library.

LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

SAS (Statistical Analysis System) is a very powerful, general purpose data manipulation tool; its function includes, but is not limited to, statistical analysis. It can be used to capture, edit, and report on a variety of data. Statistical procedures and reports can be specified to summarize the data and print the resulting information.

This course is intended to teach both the basic uses of SAS as a general data management tool and its use in preparing data for statistical analysis. Students will develop databases and program a variety of SAS features, including basic statistical procedures. The class does not attempt to teach statistics and prior knowledge of statistics is not necessary.

INTRODUCTION TO IBM's LIBRARY READER

presented by Denny Knapp of the Applications Service Bureau

DATE & TIME: February 11, 1993 9:00 a.m. to 11:00 a.m.

February 16, 1993 9:00 a.m. to 11:00 a.m.

PREREQUISITE: None

LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This free class will provide an introduction to the IBM Online Library Reader software soon to be made available on the State personal computer network. Library Reader provides the ability to access, on-line from your workstation, the IBM mainframe hardware and software manuals. This will greatly reduce the need for hard copy mainframe manuals. Library Reader provides several advanced capabilities such as indexed or approximate searches, hypertext linking, logical grouping of manuals into "bookshelves", user entered "margin notes", and much, much more. This session will have some hands-on work, so class sizes will be limited.

MVS/ESA - DIFFERENCES FROM MVS/XA:

presented by Denny Knapp of the Application Services Bureau

DATE & TIME: January 26, 1993 9:00 a.m. to 11:00 a.m.

January 27, 1993 9:00 a.m. to 11:00 a.m.

PREREQUISITE: An understanding of MVS/XA, Introduction to TSO/ISPF, and Introduction to JCL are recommended

LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This free session will review the major differences between MVS\XA, the operating system formerly used on the state mainframe computer, and MVS\ESA, the operating system recently implemented. This will be an overview of changes as they apply to end-users and development staff. Various subjects will be discussed, such as changes to ISPF and JCL coding.

Microcomputer Classes

FUNDAMENTALS OF DOS: presented by the staff of The Computer School

DATE: February 17, 1993
TIME: 8:30 a.m. to 3:30 p.m.
PREREQUISITE: Beginning Microcomputer Skills
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

"Fundamentals of DOS" is intended for microcomputer users who need to know more about controlling the microcomputer through its operating system. Programming experience is NOT required. Topics to be covered include:

- What is DOS? Why is it necessary to know about it?
- DOS names for peripherals
- File naming
- Set-up files such as CONFIG.SYS
- Internal DOS commands - DIR, ERASE, RENAME, TYPE, COPY and their variations
- External commands - FORMAT, SYS, DISKCOPY, CHKDSK, MODE
- Interpreting batch files
- Backup procedures

INTERMEDIATE DOS: presented by the staff of The Computer School

DATE: February 22, 1993
TIME: 8:30 a.m. to 3:30 p.m.
PREREQUISITE: Fundamentals of DOS or equivalent
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class is designed to follow the "Fundamentals of DOS" class and to give the user a better understanding of and increased ability to use DOS. It is not designed for programmers and does not cover all the advanced features of the operating system. The following topics are covered:

- | | |
|------------------------|-----------|
| • ATTRIB | • JOIN |
| • Batch File Creation | • LABEL |
| • EDLIN | • MODE |
| • Batch file commands | • REPLACE |
| • DISKCOMP | • SELECT |
| • Filters (FIND, MORE) | • XCOPY |

INTRODUCTION TO PFS:PROFESSIONAL FILE, VERSION 2.0: presented by Irvin Vavruska of the Application Services Bureau

DATE: January 6, 1993
TIME: 8:30 a.m. to 4:30 p.m.
PREREQUISITE: Beginning Microcomputer Skills
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

The PFS:Professional File software is an easy-to-use file management system. This course will give participants hands-on experience creating databases--demonstrating the flexibility of this software in storing, retrieving, and updating a large amount of related information.

Word Processing Classes

INTRODUCTION TO WORDPERFECT: presented by the staff of The Computer School

DATE: December 9 and 10, 1992
January 28 and 29, 1993
February 8 and 9, 1993
TIME: 8:30 a.m. to 3:30 p.m. on first day
8:30 a.m. to noon on second day
PREREQUISITE: Beginning Microcomputer Skills or equivalent
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class is a generic introduction to WordPerfect for new users of release 5.0 or 5.1. Experience with WordPerfect is not necessary. Participants will go through the fundamentals of creating, formatting, editing and printing documents. Some advanced features will also be covered, including checking spelling, finding a word or phrase, marking blocks of text, moving text and listing/retrieving document files.

WORDPERFECT 5.1 TABLES: presented by staff of the Computer School

DATE: January 21, 1993
TIME: 1:00 p.m. to 4:30 p.m.
PREREQUISITE: Introduction to WordPerfect 5.0 or 5.1
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class will cover the creation of tables in WordPerfect 5.1. Once students practice with WordPerfect's Tables feature they will be able to create and edit large, complex tables and provide automatically for table entries requiring calculation. Students will learn to create tables with text only or with combinations of text and numbers. Students will use math functions and create formulas to generate table entries and will define and generate column totals and row totals.

WORDPERFECT 5.1 COLUMNS AND MATH FUNCTIONS: presented by staff of the Computer School

DATE: January 21, 1993
TIME: 8:30 a.m. to noon
PREREQUISITE: Introduction to WordPerfect 5.0 or 5.1
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class will cover the column and math features in WordPerfect 5.1. Students will learn to set up and edit newspaper and parallel columns of various widths and lengths. They will practice editing text or figures in columns without losing the desired layout or visual effect. For column entries requiring calculation, subtotals and totals, students will learn to create and use column definitions, math functions, and formulas.

WORDPERFECT COMPLEX DOCUMENT FUNCTIONS: presented by staff of the Computer School

DATE: December 3, 1992
February 18, 1993
TIME: 8:30 a.m. to noon
PREREQUISITE: Introduction to WordPerfect 5.0 or 5.1
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class will cover Master and Subdocument design as well as creation of tables of contents. Using WordPerfect's Master Document feature allows creation of larger or more complex documents while providing more manageable and editable documents. Examples are reports containing multiple chapters or requiring tables of contents, lists of figures and tables, outlines, headers and/or footers. Students currently using WordPerfect 5.0 or 5.1 will learn WordPerfect features that make it easy to generate tables of contents, lists and outlines and to combine subdocuments into a complex master document. Students will learn how to build, edit and expand a master document that includes lists of the document's contents.

MORE WORDPERFECT COMPLEX DOCUMENT FUNCTIONS—FONTS, STYLES AND LISTS:
presented by staff of the Computer School

DATE & December 3, 1992 1:00 p.m. to 4:30 p.m.
TIME: February 19, 1993 8:30 a.m. to 12:00 noon
PREREQUISITE: WordPerfect (5.0 or 5.1) Complex Document Functions
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class will expand upon the concepts covered in the prerequisite class. Persons currently using WordPerfect 5.0 or 5.1 will learn WordPerfect features that they can use to create a variety of reports and other complex documents. Students will learn to incorporate lists of tables and figures, headers and footers, footnotes or endnotes, and cross-referencing into the Master and Subdocument design. The class will also cover the use of Style, Font, Text In/Out, Graphics and Compose functions for document design and layout. This class will be taught using WordPerfect 5.1, but concepts and functions covered are available in WordPerfect 5.0.

WORDPERFECT 5.1 MACROS

presented by staff of the Computer School

DATE: February 10, 1993
TIME: 8:30 a.m. to 3:30 p.m.
PREREQUISITE: Introduction to WordPerfect 5.0 or 5.1
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This is a seminar class that will cover the theory and construction of basic WordPerfect macros. Class will begin with simple hot key and named macros and proceed through the introductory level of the macro language. Special macros will be created such as capturing inside addresses for printing envelopes and building simple menus for lists of commonly used tasks. Students are encouraged to bring examples of tasks for instructor assisted class projects.

Spreadsheet Classes

INTRODUCTION TO LOTUS 1-2-3, RELEASE 2.3 OR 3.1: presented by the staff of The Computer School

DATES: December 1 & 2, 1992
February 3 & 4, 1993
TIMES: 8:30 a.m. to 4:30 p.m. each day
PREREQUISITE: Beginning Microcomputer Skills
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class is a generic introduction to Lotus 1-2-3 for persons with little or no Lotus experience. It will consist of instructions and hands-on practice, with lab time available for building spreadsheets of the participants' choosing.

The class will cover design, creation, printing and editing of spreadsheets. Additional topics will include selected graphic features, the use of formulae to connect spreadsheets, and the opening of multiple files at the same time. Students will learn about new WYSIWYG (What You See Is What You Get) features of Releases 2.3 and 3.1 such as enhanced printing of spreadsheets and graphs.

INTERMEDIATE LOTUS 1-2-3, RELEASE 2.3 OR 3.1: presented by the staff of The Computer School

DATE: January 20, 1993
TIME: 8:30 a.m. to 4:30 p.m.
PREREQUISITE: Introduction to Lotus 1-2-3
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This course is intended for users of Release 2.3, 3.1 or 3.1+. It covers intermediate features of Lotus 1-2-3 for those who are familiar with Lotus basics. It consists of instructions and hands-on practice, with lab time available for building spreadsheets of the students' choosing.

The following topics will be presented:

- @ functions
- Date and time formats and functions
- Ranges--naming, hiding and protecting ranges; using range commands
- Global defaults
- Titles, windows and text editing

Time permitting, the following topics will be covered with some hands-on practice:

- Selected file functions and file linking
- Magellan Viewer Addin (available in Releases 2.3 and 3.1+ only)
- Auditor Addin (available in Releases 2.3 and 3.1+ only)

LOTUS FREELANCE: presented by Irvin Vavruska of the Application Services Bureau

DATE: December 8, 1992

TIME: 8:30 a.m. to 4:00 p.m.

PREREQUISITE: Beginning Microcomputer Skills

LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class will give participants hands-on experience using Freelance to create many types of figures, drawings and graphs. Students will learn to use Freelance's symbol library and freehand drawing capabilities and to import data from Lotus 1-2-3 spreadsheets to create a publication-quality chart or graph.

Database Classes

MICRO DATABASE CONCEPTS AND DESIGN: presented by Denny Knapp of the Application Services Bureau

DATE: January 11, 1993

TIME: 8:30 a.m. to 4:30 p.m.

PREREQUISITE: Beginning Microcomputer Skills

LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class is designed to give participants a preliminary understanding of what a relational database is and how it compares to other products like Lotus 1-2-3 and PFS:Professional File. The class teaches database design techniques and is a prerequisite for other database classes offered by ISD.

INTRODUCTION TO R:BASE, RELEASE 3.1: presented by the staff of The Computer School

DATE: January 12, 13 & 14, 1993
TIME: 8:30 a.m. to 4:30 p.m. on first and second days
8:30 a.m. to noon on third day
PREREQUISITE: Beginning Microcomputer Skills, Micro Database Concepts and Design and Fundamentals of DOS
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This class will give participants hands-on experience creating a database and developing a simple application with R:Base 3.1. The application will include database updates, queries, and simple form and report generation. The R:Base menu system will be used to develop the application. This class will not cover the R:Base command mode or programming other than menu system application development.

R:BASE VIEWS (RELEASE 3.1): presented by Jane Black Eagle of the Application Services Bureau

DATE: December 7, 1992
TIME: 1:00 p.m. to 3:00 p.m.
PREREQUISITE: Beginning Microcomputer Skills, Micro Database Concepts and Design and Fundamentals of DOS
LOCATION: Basement of the Teachers Retirement Bldg. at 1500 6th Ave.

This free demonstration class will cover the design and creation of views in R:Base and when to use them.

ISD CLASS ENROLLMENT APPLICATION
COMPLETE THIS APPLICATION IN FULL AND
RETURN IT TO THE INFORMATION SERVICES "NETWORK
ASSISTANCE CENTER" PRIOR TO THE FIRST DAY OF CLASS

COURSE DATA

Course Requested: _____

Date Offered: _____

STUDENT DATA

Name: _____

Soc. Sec. Number (for P/P/P): _____

Agency & Division: _____

Mailing Address: _____

Phone: _____

How have you met the prerequisites for this course?
Explain, giving the class(es) taken, tutorial(s)
completed, and/or experience.

BILLING INFORMATION/AUTHORIZATION

ISD Billing Number (5 digits): _____

Authorized Signature: _____

FULL CLASS FEE WILL BE BILLED TO THE REGISTRANT UNLESS
CANCELLATION IS MADE THREE BUSINESS DAYS BEFORE
THE START DATE OF THE CLASS.

SEND COMPLETED FORM TO:
ISD NETWORK ASSISTANCE CENTER, DEPARTMENT OF ADMINISTRATION

DEPARTMENT OF ADMINISTRATION
INFORMATION SERVICES DIVISION
ROOM 25 MITCHELL BLDG
HELENA MT 59620

HAROLD CHAMBERS
MONTANA STATE LIBRARY
REFERENCE & INFO SERVICES
1515 E SIXTH
HELENA MT 59620

DEADHEAD